

RACHEL CARSON NATIONAL WILDLIFE REFUGE

Wells, Maine

**ANNUAL NARRATIVE REPORT
Calendar Year 1992**

**U.S. Department of the Interior
Fish and Wildlife Service**

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A. HIGHLIGHTS

B. CLIMATIC CONDITIONS

Local climatic data was unavailable for the year. In past years information had been obtained from a station in Augusta, over 80 miles north of the office and not representative of weather for the refuge. Arrangements had been made with the Wells Reserve to share information from their weather station however, their weather station experienced several technical problems providing spotty and inconclusive information. Plans are to establish a small weather station or at a minimum, equipment to measure and evaluate local temperature, rain and snow.

C. LAND ACQUISITION

Fee Title to the Nature Conservancy Tract 135d was received March 17th.

Title to Hubbard Tract 64,a,b received June 23rd.

Title to Halle Tract 65,R received June 24th.

October 21st managers from refuges in Maine and Realty staff Bob Miller met with Congressional representatives to present the annual land acquisition status update and answer any additional questions needed.

D. PLANNING

Much emphasis throughout the year was placed on planning efforts for the proposed Visitor/Environmental Education Center for the refuge. February 12th Landscape Architect Ruth Raphael and Historic Preservation Officer John Wilson from the Regional Office and the State Historic Preservation Officer, met with Manager Kimbrell-Anderson to review the barn at the Wells Reserve as a prospective site for the Visitor/Environmental Ed Center. Plans and information had previously been reviewed by the Engineering. The barn was determined to have historic value but not limiting with respect to use for the development of the Center from historic and engineering perspectives.

March 13th a presentation on the proposed Visitor Center was made to Regional Director Ron Lambertson and numerous Regional Office staff. The presentation was well received with much encouragement to proceed with plans as presented.

April 21st Refuge Manager Kimbrell-Anderson and Assistant Manager Houghton provided a presentation on the proposed Visitor/Environmental Education Center to Project Leaders from

refuges in the state of Maine, Cooperative Research Coordinator, , and staff of Sunkhaze Meadows Refuge and Old Town Ecological Field Station. The facility planned for Rachel Carson Refuge has been identified as a pilot for similar facilities at refuges in Maine. Many questions were fielded but the overall response was very positive.

E. ADMINISTRATION

1. Personnel

Debra Kimbrell-Anderson arrived in February, filling the long vacant position of Refuge Manager. Funding was not available to keep temporary employee Kelly Kreis beyond spring. Her presence and contibution was missed following the end of her term. The Carpenter, Maintenance and Labor positions remained unfilled.

Personnel

Debra Kimbrell-Anderson, Refuge Manager	GS-11	PFT
David Houghton Assistant, Refuge Manager	GS-7	PFT Trsfr'd
6/27/92 to Ningret Refuge		
Cheryl Boisvert, Secretary	GS-5	PFT Trsfr'd
10/31/92 to GOMCEP		
Kelly Kries, Biological Technician	GS-5	TPT

3. Other

Revenue Sharing received and distributed during 1992 was:

Cumberland County

Cape Elizabeth:	\$	37.00
Scarborough:	\$	9,713.00
Cumberland County Total:	\$	9,750.00

York County

Saco:	\$	19,025.00
Old Orchard Beach:	\$	260.00
Biddeford:	\$	1,646.00
Kennebunk:	\$	3,627.00
Kennebunkport:	\$	4,803.00
Wells:	\$	13,687.00
Ogunquit:	\$	104.00
York:	\$	958.00
Kittery:	\$	759.00
York County Total:	\$	44,869.00

Total Revenue Sharing Distributed in 1992 for 1991.	\$	54,619.00
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4. Volunteer Program

Several volunteers assisted staff throughout the year representing the Fish and Wildlife Service and Rachel Carson National Wildlife Refuge at festivals, leading tours, conducting biological surveys, talking to various groups, helping with facility maintenance and boundary posting.

Volunteers: Steve Walker, Judy Camuso,

5. Funding

The Station's fund target for FY92 was \$126,930. This figure included: \$113,180 for "Minimum costs," \$8,000 for Base Maintenance, \$5,250 in MMS funds to replace entrance barriers and \$500.00 for Carson Trail repairs. A request was submitted and approved to re-allocate the \$5,250 to cover less formal entrance barriers and increased repair needs on the Carson Trail.

Funding for fiscal year 1992 and six years prior is shown below.

<u>Fiscal Year</u>	<u>Amount</u>
1992	\$126,930
1991	\$125,000
1990	\$171,000
1989	\$139,122
1988	\$123,117
1987	\$142,493
1986	\$ 69,735

6. Safety

Regional Safety Manager Pete Suich conducted a station safety inspection March 27th. No significant deficiencies were reported. A package guard for the Jeep Cherokee was suggested and later ordered. Eight "GFI's" were also installed in the refuge office and garage following the inspection.

The week of August 3rd Manager Kimbrell-Anderson attended safety training in Andover, MA as required for Station Safety Officers following Assistant Manager Houghton's transfer.

F. HABITAT MANAGEMENT

1. General

A diversity of habitat types are found on Rachel Carson Refuge, coastal saltmarshes being the most common. Coastal saltmarsh is at

its northern limits in Southern Maine making the marshes of the refuge vital to the existence of numerous species along the southern coast. The rocky coast typical of the state is also present in the northern units of the refuge.

2. Wetlands

Tidal saltmarsh constitutes the majority of wetlands occurring on Rachel Carson NWR.

The large wetland project proposed on Brown Street of the Upper Wells division is still on hold pending obtainment of permits and ES approval. The project involves the conversion of 12+ acres of forested wetland to a managed shallow wetland.

October 1st and 2nd Lisa from SCS collected core samples from proposed wetland restoration sites.

3. Forests

Approximately 20% of the refuge consists of forested uplands.

5. Grasslands

Special Use Permits were issued permitting mowing of small areas of grasslands following previously established agreements and deeds. Annual mowing assists the refuge in maintaining habitat diversity.

8. Fire Management

Assistant Manager David Houghton and Bio-tech Kelly Kreis attended basic Fire Management training the week of February 24th, in preparation for prescribed burning should plans and conditions permit management activities. Fire Coordinator Allen Carter and Assistant Coordinator Rick Vollick were contacted during the year to assist with fire management planning and acquisition of equipment needs.

G. WILDLIFE

1. Wildlife Diversity

A variety of habitats exist within the 45 mile stretch of coastline of the Rachel Carson Refuge, providing food and shelter to a wide diversity of species. Approximately 250 bird species have been identified using or nesting on the refuge. Many mammal and reptile species are also present. Moose, otter, coyote, fox, raccoon and skunk are among the more commonly sighted mammals. Wood and Box turtles are observed each year and Blandings and Spotted turtles

are thought to also make use of the refuge.

2. Endangered and/or Threatened Species

Below is a current listing of endangered and threatened species for the State of Maine that occur or may occur on the refuge:

<u>Species</u>	<u>Status</u>
Bald Eagle - <u>Haliaeetus leucocephalus</u> *	Endangered
Golden Eagle - <u>Aquila chrysaetos</u>	Endangered
Peregrine Falcon - <u>Falco peregrinus</u> *	Endangered
Tundra Peregrine Falcon - <u>Falco peregrinus tundrius</u> **	Threatened
Piping Plover - <u>Charadrius melodus</u> **	Endangered
Roseate Tern - <u>Sterna dougallii</u> *	Endangered
Least Tern - <u>Sterna antillarum</u>	Endangered
Sedge Wren - <u>Cistothorus platensis</u>	Endangered
Grasshopper Sparrow - <u>Ammodramus savannarum</u>	Endangered
Box Turtle - <u>Terrapene carolina</u>	Endangered
Blanding's Turtle - <u>Emydoidea blandingii</u>	Threatened
Spotted Turtle - <u>Clemmys guttata</u>	Threatened
Black Racer - <u>Coluber constrictor</u>	Endangered

* Federally listed Endangered Species

** Federally listed Threatened Species

Bald eagles have been observed during the winter months, particularly on the northern units, for the last few years. They were observed during the 1992 winter and were recorded during the Christmas Bird Count conducted by Maine Audubon members.

Peregrine falcons have been observed during the spring and fall in past years and were again reported in 1992 on the refuge. Nesting colonies of Roseate terns exist on offshore islands and are occasionally observed on the refuge.

Manager Kimbrell-Anderson and Assistant Manager Houghton met with Maine Audubon and Wells Reserve staff on several occasions to plan and coordinate protection of piping plover in the area of the refuge.

Piping plover utilize several areas on and near the refuge, including lands within the proposed acquisition boundary. The refuge works cooperatively with Maine Department of Inland Fisheries and Wildlife, the Maine Audubon Society and several interested private landowners to monitor plover activity within and adjacent to the refuge. Discussions with land owners in the Crescent Surf Beach area of the Upper Wells Division have occurred with the hopes of protecting plover nesting in the area through acquisition or easement. Four pair of plovers produced 16 chicks in this site during 1992, with an incredible fledging success of all 16 chicks. An additional pair nested at the Laudholm/Wells Reserve site in Wells but unfortunately no birds reached fledgling stage. Two pairs nested in the Goose Rocks area with three chicks

fledged.

Least Terns use many of the same locations as piping plover on and near the refuge. During 1992, fifteen pairs nested in the Crescent Surf Beach area with 42 chicks reaching fledgling stage. Fourteen pairs nested at the Laudholm/Wells Reserve site with eleven reaching fledgling stage.

3. Waterfowl

The refuge was originally established to protect the coastal marshes and estuaries of southern Maine. These areas provide important migration and wintering habitat for waterfowl, primarily black duck, and many other species of wildlife.

The Maine DIF&W Mid-Winter Inventory is conducted along the coast in January each year. The southern Maine coastal area includes the refuge and is designated as zone 8. The 1992 survey showed:

4. Marsh and Water Birds

Several species including glossy ibis, snowy egret, and little blue heron utilize the marshes of the refuge during the year. Two species currently nest on the refuge; green-backed heron and the black-crowned night heron. Observations are recorded by the volunteers and staff.

5. Shorebirds, Gulls, Terns and Allied Species

The refuge provides important migration habitat for a variety of shorebird species. The Biddeford Pool division is heavily utilized by shorebirds during the year. No formal surveys are currently conducted by refuge staff.

6. Raptors

Several species utilize the refuge during the year. Three species have been confirmed as breeding on the refuge; sharp-shinned and cooper's hawks and great horned owl. The northern goshawk, red-shouldered, red-tailed and broad-winged hawks as well as the American kestrel and barred owl are probable breeders. Other species present at various times include osprey northern harrier, merlin, short-eared owl, northern saw-whet owl and snowy owl.

7. Other Migratory Birds

Nest boxes for eastern bluebirds had been established throughout the refuge. The boxes were placed in habitat favoring tree swallows which utilize them readily but are not frequently used by bluebirds. The nest boxes are planned for relocation as soon as manpower permits, to more appropriate habitat for bluebirds.

8. Game Mammals

White-tailed deer are common throughout all of the divisions. The Upper Wells division contains the largest concentrations due to a State designated wildlife sanctuary that overlays the area and precludes hunting.

The number of moose sightings on the refuge and adjacent lands continues to increase each year. Sightings of several adults and cows with calves are being reported fairly regularly. Sightings were reported on the Upper Wells and Mousam River divisions.

Other mammal species found on the refuge include coyote, red and gray fox, fisher, porcupine, river otter, and mink.

9. Marine Mammals

Harbor seals are found throughout the refuge. The Wells Harbor area has been utilized as a "haul out" by as many as 30 seals for a number of years.

11. Fisheries Resources

H. PUBLIC USE

1. General

Rachel Carson NWR is spread along 45 miles of the southern Maine coastline between Portsmouth, NH and Portland, ME. This stretch of coast also contains Maine's only sandy beaches and attracts approximately 70 percent of the estimated 9 million visitors to the state.

Visitors from 42 states, Washington DC, Canada and around the World including Japan, New Zealand, Australia, and several European countries made a visit to Rachel Carson Refuge a part of their travel plans during 1992.

4. Interpretive Foot Trails

The Carson Trail is located at the refuge headquarters on the Upper Wells division. This self guided loop trail is approximately one mile long and wheelchair accessible. The trail winds through the uplands and along the edge of the saltmarsh and is the only developed public use trail on the refuge.

The number of visitors using the Carson Trail in 1992 is unknown. Estimated figures from an infrequently operating trail counter leave the refuge with highly under measured figures. Visitor log sheets inside the office help identify use but do not differentiate

between the trail uses and visits to the office, nor do they address any visitation on weekends. The purchase of trail counters, use of additional visitor logs and regular inquiries of visitors by staff, are all planned in the future to assist with the evaluation of this information.

7. Other Interpretive Programs

Refuge staff and volunteers provided information about the Service in presentations made throughout the year.

8. Hunting

Seven of the refuges 10 divisions are open to hunting of one type or another. All are open to deer hunting and six are open to migratory game bird hunting which includes waterfowl and woodcock. Small game hunting is also permitted on those divisions open to hunting.

Waterfowl season opened on October 5th.

October 31st marked the opening of the firearms deer season.

Four special use permits were issued for seasonal hunting blinds, two each on the Upper Wells and Gooserocks divisions. The permits require that the blinds are available to anyone on a first come first serve basis and be removed 15 days after the season closes.

Deer hunting was heaviest opening and closing days. The Brave Boat Harbor and Upper Wells divisions have the highest use. Hunting is permitted by archery or shotgun only due to the proximity of homes and businesses to the refuge. Most of the communities either have or are considering ordinances to ban hunting with rifles in those areas heavily populated which would include the refuge.

A local sportsman's group raises and releases ring-neck pheasant on property near the Lower Wells division during small game season. During that time hunting activity is heavy in that area since some birds do make it to the refuge and just about everybody knows of the program.

(there is wide spread knowledge of)

9. Fishing

The refuge currently does not allow any fishing although people can fish from boats in the waterways that run through the refuge. Freshwater opportunities do not exist on the refuge; all fishing activity is for saltwater species.

11. Wildlife Observation

Other than the Carson Trail, there are no designated trails on the refuge. Opportunities for viewing wildlife do occur on most of the refuge divisions from adjacent roads. On the Brave Boat Harbor and Mousam River divisions abandoned trolley grades pass through those

divisions and are used by locals. An estimated 50,000 visits were generated to the refuge for wildlife viewing and photography in 1992.

14. Picnicking

Two picnic tables are located at the refuge information kiosk and beginning of the Carson Trail. These tables are heavily used by visitors and school groups visiting the refuge and walking the trail.

17. Law Enforcement

Refuge Manager Kimbrell-Anderson and Assistant Manager Houghton attended annual L.E. Refresher training during the weeks of April 5th and 12th.

During the hunting season all of the refuges divisions were checked for hunting activity. Field checks were conducted with all individuals contacted. Most individuals were generally surprised to be contacted by a Federal officer and stated that they had not been checked in three years or more.

Manager Kimbrell-Anderson requalified as required on November 13th with Service revolver and shotgun at Rachel Carson Refuge with Firearms instructor Frank Dres .

I. EQUIPMENT AND FACILITIES

2. Rehabilitation

3. Major Maintenance

The annual snowmelt, spring rains and frozen ground brought flooding to the refuge office. When the office was constructed in 1990, the parking lot was finished slightly higher and sloped toward the building. Consequently with nowhere for the water to go and unable to pass through the ground it ends up in our building.

4. Equipment Utilization and Replacement

5. Communications Systems

6. Computer Systems

J. OTHER ITEMS

3. Items of Interest

October 26th the refuge participated in a mock emergency oil spill response with the "spill" taking place from Canada south along the coast.